Amendments to the Specification

Please replace the paragraph at page 11, lines 29 through 31 with the following amended paragraph:

Figure 53 shows the amino acid sequence (SEQ ID NO:2) of the heavy chain V region and the amino acid sequence (SEQ ID NO:4) of the light (kappa) chain V region of human monoclonal antibody 2F2 with CDR regions (SEQ ID NOs:13-18) designated.

Please replace the paragraph at page 11, lines 35 through 37 with the following amended paragraph:

Figure 55 shows the amino acid sequence (SEQ ID NO:6) of the heavy chain V region and the amino acid sequence (SEQ ID NO:8) of the light (kappa) chain V region of human monoclonal antibody 7D8 with CDR regions (SEQ ID NOs:19-24) designated.

Please replace the paragraph at page 12, lines 4 through 6 with the following amended paragraph:

Figure 57 shows the amino acid sequence (SEQ ID NO:10) of the heavy chain V region and the amino acid sequence (SEQ ID NO:12) of the light (kappa) chain V region of human monoclonal antibody 11B8 with CDR regions (SEQ ID NOs:25-30) designated.

Please replace the paragraph at page 13, lines 12 through 20 with the following amended paragraph:

In yet another embodiment the invention the invention relates to human polyclonal antibodies which bind to an epitope in the small first extracellular loop of human CD20. In still another embodiment the invention also encompasses human polyclonal antibodies which bind to a discontinuous epitope on CD20. In a further embodiment the invention relates to human polyclonal antibodies which bind a discontinuous epitope on CD20, which has part of the first small extracellular loop and part of the second extracellular loop. In still a further embodiment the invention relates to human polyclonal antibodies which bind to a discontinuous epitope on CD20, which has residues AGIYAP (SEQ ID NO:93) of the small first extracellular loop and residues MESLNFIRAHTPYI (SEQ ID NO:94) of the second extracellular loop.

Please replace the paragraph at page 63, lines 18 through 26 with the following amended paragraph:

cDNA preparation of 2F2 and 7D8: 5'-RACE-Ready Complementary DNA (cDNA) of RNA was prepared from 1 μg total RNA, using the SMART RACE cDNA Amplification kit (Clonetech), following the manufacturer's protocol.

V_H and V_L regions were amplified using an advantage HF 2 PCR Kit (Clonetech, BD) and using the following primers:

V_K RACE2 5' GCA GGC ACA CAA CAG AGG CAG TTC CAG ATT TC (SEQ ID NO:31) anneals in C-kappa
V_H RACE2 5' GCT GTG CCC CCA GAG GTG CTC TTG GAG G (SEQ ID NO:32) anneals in C_{H1}

Please replace the paragraph at page 64, lines 1 through 37 with the following amended paragraph:

PCR primers used to amplify V_H and V_L regions for cloning:

Primer pairs used:

V_H: FR1 5' primers

AB62	CAg gTK CAg CTg gTg CAg TC (SEQ ID NO:33)
AB63	SAg gTg CAg CTg KTg gAg TC (SEQ ID NO:34)
AB65	gAg gTg CAg CTg gTg CAg TC (SEQ ID NO:35)

V_H leader 5' primers

AB85	ATg gAC Tgg ACC Tgg AgC ATC (SEQ ID NO:36)
AB86	ATg gAA TTg ggg CTg AgC Tg (SEQ ID NO:37)
AB87	ATg gAg TTT ggR CTg AgC Tg (SEQ ID NO:38)
AB88	ATg AAA CAC CTg Tgg TTC TTC (SEQ ID NO:39)
AB89	ATg ggg TCA ACC gCC ATC CT (SEQ ID NO:40)

V_H 3' primer

AB90	TgC CAg ggg gAA gAC CgA Tgg (SEQ ID NO:41)

V_K:

FR1 5' primers

AB8	RAC ATC CAg ATg AYC CAg TC (SEQ ID NO:42)
AB9	gYC ATC YRg ATg ACC CAg TC (SEQ ID NO:43)
AB10	gAT ATT gTg ATg ACC CAg AC (SEQ ID NO:44)
AB11	gAA ATT gTg TTg ACR CAg TC (SEQ ID NO:45)
AB12	gAA ATW gTR ATg ACA CAg TC (SEQ ID NO:46)
AB13	gAT gTT gTg ATg ACA CAG TC (SEQ ID NO:47)
AB14	gAA ATT gTg CTg ACT CAg TC (SEQ ID NO:48)

V_K leader 5' primers

AB123	CCC gCT Cag CTC CTg ggg CTC CTg (SEQ ID NO:49)
AB124	CCC TgC TCA gCT CCT ggg gCT gC (SEQ ID NO:50)
AB125	CCC AgC gCA gCT TCT CTT CCT CCT gC (SEQ ID NO:51)
AB126	ATg gAA CCA Tgg AAg CCC CAg CAC AgC (SEQ ID NO:52)

V_K 3' primer

AB16	Cgg gAA gAT gAA gAC AgA Tg (SEQ ID NO:53)

wherein K = T or G, S = C or G, R = A or G, Y = C or T, and W = A or T.

Please replace the Table 3 at page 91, lines 21 through 24 with the following amended Table 3:

Table 3

Name	Application	Length	Oligo Sequence	SEQ ID NOs
CD20P172S	CD20 mutagenesis	36	TGGGGAGTTTTTCTCAGAGGAATTCGATGGTTCACAGTT GTA	SEQ ID NO:58
CD20N166D	CD20 mutagenesis	39	TGTAACAGTATTGGGTAGATGGG	SEQ ID NO:59
CD20N163D	CD20 mutagenesis	36	AATCATGGACATACTTAATATTA	SEQ ID NO:60
cd20exfor	CD20 construction	41	TATAGCCCGGGGCCGCCACCATGACAACACCCAGAAAT TCA	SEQ ID NO:61
cd20exrev	CD20 construction	38	GCGTCTCATGTACATTAAGGAGAGCTGTCATTTTCTAT	SEQ ID NO:62
pee13.4seqrev2	Colony PCR	23	TCGGACATCTCATGACTTTCTTT	SEQ ID NO:63
pConKseq1	Colony PCR	23	GTAGTCTGAGCAGTACTCGTTGC	SEQ ID NO:64
cd20hsapmutr (AxP)	CD20 mutagenesis	42	TGGGGAGTTTTTCTCAGAGGAATTCGATGGTTCACAGTT GTA	SEQ ID NO:65
cd20hsapmutf (AxP)	CD20 mutagenesis	42	TACAACTGTGAACCATCGAATTCCTCTGAGAAAAACTC CCCA	SEQ ID NO:66
CD20seq2	CD20 sequencing	23	TGTAACAGTATTGGGTAGATGGG	SEQ ID NO:67
cd20seq1	CD20 sequencing	23	AATCATGGACATACTTAATATTA	SEQ ID NO:68

Please replace Table 4 and 5 at page 94, line 13 through page 96, line 4 with the following amended Table 4 and 5:

Table 4

		mABs								
Amino Acid Sequence	**SEQ ID NOs**	**11B8 10 µg/ml**	**11B8 100 µg/ml**	**7D8 10 µg/ml**	**7D8 100 µg/ml**	**rituximab 10 µg/ml**	**2F2 10 µg/ml**	**2F2 100 µg/ml**	**B1 10 µg/ml**	**B1 100 µg/m**
KMECLNFIRAHCPYI	SEQ ID NO:69	**763**	**2997**	134	41	90	48	66	147	304
LKMECLNFIRCHTPY	SEQ ID NO:70	165	738	160	41	120	49	87	179	216
KMESCNFIRACTPYI	SEQ ID NO:71	**625**	**3090**	142	52	123	39	78	170	308
MESLCFIRAHCPYIN	SEQ ID NO:72	179	956	127	55	102	41	65	119	178
CFIRAHTPC	SEQ ID NO:73	188	534	181	69	134	91	114	170	212
CIRAHTPYC	SEQ ID NO:74	151	449	186	60	132	57	92	151	195
CRAHTPYIC	SEQ ID NO:75	**427**	**1605**	188	64	145	48	87	179	216
CAHTPYINC	SEQ ID NO:76	179	452	174	65	125	42	106	161	172
IPAGIYA	SEQ ID NO:77	217	950	164	76	177	48	85	165	192
PAGIYAP	SEQ ID NO:78	**449**	**2501**	170	64	111	43	85	165	300
AGIYAPI	SEQ ID NO:79	**251**	**2207**	188	73	110	44	98	187	143
GIYAPIC	SEQ ID NO:80	99	251	152	64	141	34	93	177	147
IYAPICV	SEQ ID NO:81	137	313	174	58	159	58	99	175	90
GIYAPIA	SEQ ID NO:82	172	857	177	96	156	62	96	165	121
IYAPIAV	SEQ ID NO:83	161	654	181	58	116	62	76	161	106

Table 5

		mABs			
Amino Acid Sequence	SEQ ID NOs	11B8 10 µg/ml	7D8 10 µg/ml	rituximab 10 µg/ml	2F2 10 µg/ml
PCINIYNAEPANPCE	SEQ ID NO:84	118	163	152	65
YCNIYNAEPANPSCK	SEQ ID NO:85	287	181	**2418**	86
ICIYNAEPANPSECN	SEQ ID NO:86	138	192	142	78
NCYNAEPANPSEKCS	SEQ ID NO:87	93	121	**2649**	49
ICNAEPANPSEKNCP	SEQ ID NO:88	115	165	**3283**	43
YCAEPANPSEKNSCS	SEQ ID NO:89	106	188	**3770**	65
NCEPANPSEKNSPCT	SEQ ID NO:90	159	183	**3476**	61
ACPANPSEKNSPSCQ	SEQ ID NO:91	146	148	**250**	77
ECANPSEKNSPSTCY	SEQ ID NO:92	134	179	188	68

Please replace the paragraph at page 96, lines 5 through 7 with the following amended paragraph:

As appears from Table 4, 11B8 showed binding to AGIYAP (SEQ ID NO:93) of the small first extracellular loop of human CD20 at both 10 µg/ml and 100 µg/ml, whereas the other antibodies tested did not show significant binding to AGIYAP (SEQ ID NO:93).

Please replace the paragraph at page 96, lines 8 through 10 with the following amended paragraph:

Furthermore, 11B8 showed binding to MESLNFIRAHTPYI (SEQ ID NO:94) of the second extracellular loop of human CD20 at both 10 µg/ml and 100 µg/ml, whereas the other antibodies tested did not show significant binding to MESLNFIRAHTPYI (SEQ ID NO:94).

Please replace the paragraph at page 96, lines 11 through 13 with the following amended paragraph:

As appears from Table 5, rituximab showed binding to EPANPSEK (SEQ ID NO:95) of the second extracellular loop of human CD20 at both 1 µg/ml and 10 µg/ml, whereas the other antibodies tested did not show significant binding to EPANPSEK (SEQ ID NO:95).